MISTING APPARATUS WITH MOISTURE ELIMINATOR AND RELATED METHOD

ABSTRACT OF THE DISCLOSURE

Misting apparatus includes a housing defined by a bottom wall, a top wall, a pair of side walls and a pair of end wall assemblies; a plenum chamber within the housing; a fan mounted in one of the end wall assemblies for supplying air flow to the plenum chamber; at least one misting nozzle located proximate to an outlet side of the fan to thereby supply droplets of water into the air flow, and a moisture eliminator mounted in the other of the end wall assemblies. The moisture eliminator is shaped to remove unevaporated water droplets from the cooled air before the air exits the plenum chamber. A method of supplying cooling air to a space includes the steps of a) adding water droplets to a flow of air to thereby generate a flow of cooled air; b) removing unevaporated water droplets from the cooled air; and c) delivering the cooled air to the space.